

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF JULY 31 – AUGUST 1, 2014

Prepared on July 2, 2014

ITEM NUMBER: 9

SUBJECT: Reissue Waste Discharge Requirements for Class I Wastewater Surface Impoundments Operation and for Renewal of Exemptions to the Toxic Pits Cleanup Act, for Dynegy Moss Landing LLC, Moss Landing Power Plant, Moss Landing, Monterey County; Order No. R3-2014-0029

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KEY INFORMATION

Discharger: Dynegy Moss Landing, LLC
Location: U.S. Highway 1 and Dolan Road, Moss Landing, Monterey County
Discharge Type: Chemical/boiler cleaning wastewater.
Waste Management Units: Three hazardous waste surface impoundments
Discharge Volume: Estimated 2,077,000 gallons
Present Volume: Varies; discontinuous batch discharge during boiler cleaning
Treatment: Chemical precipitation and settling
Disposal Methods: Treated liquid to permitted surface water discharge, treated solids to offsite disposal and/or recycling.
Existing Order: Waste Discharge Requirements (WDR) Order No. R3-2009-0049

This Action: Adopt WDR Order No. R3-2014-0029, including Monitoring and Reporting Program (MRP) No. R3-2014-0029

SUMMARY

Proposed Waste Discharge Requirements (WDR) Order No. R3-2014-0029 updates the current WDR Order No. R3-2009-0049, which expires August 31, 2014, for three hazardous waste surface impoundments at the Moss Landing Power Plant. WDR Order No. R3-2014-0029 authorizes Dynegy Moss Landing, LLC (Dynegy) to continue impoundment operational requirements and renews the exemptions from the Toxic Pits Cleanup Act of 1984 (TPCA), which otherwise prohibits the impoundments. There has been no substantial change in impoundment operation in the past five years, and the two WDRs are essentially the same. The WDR prohibitions and provisions are adequate to protect water quality and beneficial uses, and verification is provided by the Monitoring and Reporting Program. Water Board staff reviewed the monitoring reports and impoundment operational data submitted over the last five years, and we conclude the impoundments have not impacted water quality.

DISCUSSION

Dynegy requires the ability to utilize three hazardous waste surface impoundments at its Moss Landing Power Plant to treat and store batch discharges of acidic or basic, metal laden, boiler and chemical cleaning wastewater. WDR Order No. R3-2009-0049, adopted by the Central Coast Regional Water Quality Control Board (Water Board) on August 31, 2009, and expiring on August 31, 2014, authorizes exemptions from the California Toxic Pits Cleanup Act of 1984 (TPCA), allowing Dynegy to use the impoundments. Additionally, the WDR contains operational and monitoring requirements for the impoundments. The impoundments are also regulated by a Resource Conservation and Recovery Act (RCRA) Hazardous Waste permit administered by the California Department of Toxic Substances Control (DTSC). DTSC renewed the RCRA permit on April 6, 2006, and it will expire on April 6, 2016.

WDR Order No. R3-2014-0029 renews the terms of WDR Order No. R3-2009-0049 for another five years, and makes several findings related to water quality protection, as required by the TPCA (i.e., required by Health & Safety Code (HSC) sections 25208.4(b)(2)(A) and (B)). There has been no substantial change in impoundment operation in the past five years, and the two WDRs are essentially the same. WDR Order No. R3-2014-0029 continues to include existing TPCA exemptions (i.e., exemptions from HSC sections 25208.4 (a) and (c) granted pursuant to HSC sections 25208.4 (b) and 25208.16), allowing continued impoundment use, and reflects minor site and Hazardous Waste permit changes.

The Water Board granted the TPCA exemptions pursuant to HSC sections 25208.4 and 25208.16. Before the Water Board can renew the exemptions in the permit, the Water Board must make specific findings. Based on monitoring reports, inspection and testing reports, site visits, and the record, the following findings are made:

HSC SECTION 25208.4(b)(2)(A):

No hazardous waste constituents have migrated from the surface impoundments into the vadose zone or the waters of the state in concentrations that pollute the vadose zone, or pollute, or threaten to pollute, the waters of the state.

HSC SECTION 25208.4(b)(2)(B):

Continuing the operation of the surface impoundments does not pose a significant potential of hazardous waste constituents migrating from the surface impoundments into the vadose zone or the waters of the state, thus polluting the vadose zone, or polluting, or threatening to pollute, these waters.

HSC SECTION 25208.16(a)(1):

No extremely hazardous wastes are currently being discharged into the surface impoundments, and

1. The records of the person applying for an exemption indicate that no extremely hazardous wastes have been discharged into the surface impoundment, and
2. Extremely hazardous wastes are not present in the surface impoundment, in the vadose zone, or in the waters of the state.

HSC SECTION 25208.16(a)(2):

The surface impoundments are used for the purpose of temporary storage and non-continuous batch treatment, all hazardous wastes (resulting from discharge of restricted hazardous waste) are removed after each batch treatment within 30 days of discharge (of restricted hazardous waste) into the impoundment, and the surface impoundment is visually inspected prior to each use and tested for integrity at least annually and complies with subdivision (a) of section 25208.7. Reports of these tests are filed with the Water Board.

HSC SECTION 25208.16(a)(3):

The surface impoundment is in compliance with construction criteria and groundwater monitoring requirements of section 25208.5 and Dynegy filed a hydrogeological assessment report pursuant to section 25208.8.

COMPLIANCE HISTORY

Dynegy has reported no violations since the Water Board adopted WDR Order No. R3-2009-0049, and Dynegy has complied with the conditions and requirements of the current WDR and MRP.

Water Board staff reviewed the current WDR, MRP, monitoring reports, and impoundment operational data submitted over the last five years and we conclude the impoundments have not impacted water quality and beneficial uses. Groundwater samples from specific monitoring wells sometimes contained statistically significant increases of some constituents (e.g., various metals and bromide) by slightly exceeding statistical upper control limits. Dynegy re-sampled, re-analyzed, and reported results from those wells as required by WDR Order No R3-2009-0049 and other agency hazardous waste permits. Dynegy submitted demonstration reports to present their evaluation of the data results pursuant to regulations and permits. Dynegy concluded, based on groundwater and analytical data, and other data such as impoundment operational records (impoundment and LCRS content or lack of content), and impoundment content chemistry, that the increases were not attributed to impoundment releases.

Water Board staff agree with Dynegy that the statistically significant increases in groundwater have not been due to releases from the impoundments. Generally, groundwater constituent statistically significant increases are from natural variation of groundwater chemistry, release from the waste management unit monitored, sampling or handling cross-contamination, laboratory error, or other causes. At this facility, the statistically significant increases have almost always been attributed to natural variations in groundwater and associated statistical analysis error margins, and occasionally to cross contamination in sampling and handling methodology. Evidence to support that natural groundwater variations, rather than impoundment releases, were the causes of the increases is: 1) sometimes similar constituent concentrations were reported for wells upgradient and downgradient of the impoundments; 2) sometimes the increases were only present in a deeper well of a cluster of wells screened in different vertical zones; 3) wastewater was not present in an impoundment prior to and when a release might otherwise have been indicated by the groundwater statistically significant increase; 4) there was no wastewater in the impoundment leachate collection removal systems below the liners; 5) chemistry of wastewater in impoundments was dissimilar from the increases of the constituents observed in the groundwater; and 6) increases occasionally caused by

sample cross contamination have been indicated by the presence of the same constituent that was increased in groundwater in sample equipment blanks or trip blanks.

Groundwater concentrations of constituents exhibiting statistically significant increases generally did not exceed statistical comparison standards by more than 25-50% (and often by much less than 20%), and they almost never exceeded generic groundwater standards such as drinking water maximum contaminant levels.

Groundwater monitoring statistical analysis methodology has been reviewed and modified several times to improve performance and reliability.

ENVIRONMENTAL SUMMARY:

Waste discharge requirements for existing facilities are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Sections 15301 and 15302, Chapter 3, Title 14, of the California Code of Regulations.

PUBLIC COMMENTS:

On April 16, 2014, Dynegy Moss Landing, LLC posted in the local post office and municipality office, and published in *The Salinas Californian* newspaper, public notice that the subject permit would be considered for renewal by the Water Board at its regularly scheduled hearing July 31/August 1, 2014, in Santa Barbara. The public notice solicited public comments, which were due to Water Board staff on May 30, 2014. No public comments were received by Water Board staff by the date of this staff report (July 1, 2014).

On April 14, 2014, Water Board staff posted the Public Notice, proposed WDR Order No. R3-2014-0029, and proposed Monitoring and Reporting Program R3-2014-0029 on the Water Board internet website. That posting also solicited public comments, which were due to Water Board staff on May 30, 2014.

RECOMMENDATION

Adopt Waste Discharge Requirements Order No. R3-2014-0029, which includes Monitoring and Reporting Program No. R3-2014-0029, as proposed.

ATTACHMENTS

1. Proposed WDR Order No. R3-2014-0029.
2. Proposed Monitoring and Reporting Program No. R3-2014-0029.